

REMARKS

Claims 1-20 are currently pending in the application. Claims 1, 10, 17 and 20 have been amended.

The drawings are objected to under 37 CFR §1.83(a) allegedly because the drawings do not show the appliqué set forth in claim 5. A replacement sheet bearing a new Fig. 8 that shows the use of an appliqué to realize a flow disturbance structure is attached hereto. The specification has also been amended accordingly. Support for the newly added Fig. 8 is set forth in claim 5 and paragraph [0020] as originally filed.

Claims 1-2, 4, 6-10 and 13-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 1,631,240 ("the '240 patent") to Amet in view of U.S. Patent No. 1,446,266 ("the '266 patent") to Murray.

Independent claim 1 is directed to a projection system that is used to produce an image for a viewer that is distorted relative to the original image. The system comprises: (a) a projection substrate comprising a front side from which a viewer views an image, a back side from which a viewer does not typically view an image, and a flow disturbance structure; (b) a water system for providing water to flow over at least one of the front side and back side of the projection substrate so as to interact with the flow disturbance structure; and (c) a projector for projecting an image towards the projection substrate. Characteristic of the flow disturbance structure is that during operation of the system, the flow disturbance structure causes the water

that is passing over the structure to ripple to such an extent that the image seen by a viewer is a perceptibly distorted image relative to the original image, i.e., the image in the projector.

The '240 patent is directed to a motion picture screen. The screen is designed to provide a better picture for a viewer by, among other things, eliminating back flash, improving the reflected image, and increasing the clear-cut nature of the picture. Notably, the screen causes the picture produced on the screen to be almost entirely free from distortion. See, page 1, lines 5-11, 37-57, and 104-105. As a consequence, the '240 patent does not teach or suggest any kind of structure for producing a distorted image. Specifically, the '240 patent does not teach or suggest a projection substrate with a flow disturbance structure that during operation, produces a water ripple that interacts with a projected image to produce an image for a viewer that is perceptibly distorted relative to the image held by the projector. Further, the '240 patent does not teach or suggest such a projection substrate in combination with any of the other elements of claim 1. The '266 patent does not remedy any of the deficiencies noted with respect to the '240 patent. Based on the foregoing, it is respectfully asserted that independent claim 1 is patentable over the cited references.

Independent claim 10 is allowable for substantially the same reasons as independent claim 1.

Independent claim 17 is directed to a projection system that is used to produce an image for a viewer that has a variation in brightness. The system comprises: (a) a translucent projection substrate comprising a front side from which a viewer views an image, a back side from which a viewer does not typically view an image, and a flow disturbance structure; (b) a water system for providing water to flow over at least one of the front side and back side of the projection substrate so as to interact with the flow disturbance structure; and (c) a lighting structure for

projecting light an angle to one of the front and back side of the translucent projection substrate. The light and the rippling water produced during operation of the system interact to produce an image for a viewer in which there is a perceptible change in brightness that correlates with the crest of a ripple. Stated differently, the interaction of the light and a crest of the rippling water create a “shadow” relative to other portions of the image.

The ‘240 patent is directed to a motion picture screen. The screen is designed to provide a better picture for a viewer by, among other things, eliminating back flash, improving the reflected image, and increasing the clear-cut nature of the picture. Notably, the screen causes the picture produced on the screen to be almost entirely free from distortion. See, page 1, lines 5-11, 37-57, and 104-105. The ‘240 patent does not teach or suggest any kind of structure for causing projected light to interact with rippling water to produce an image for a viewer in which there is a perceptible change in the brightness of the image that correlates with the crest of a water ripple. The ‘266 patent does not remedy any of the deficiencies noted with respect to the ‘240 patent.

Based on the foregoing, it is respectfully asserted that independent claim 17 is patentable over the cited references.

Independent claim 20 is directed to a projection system that is used to produce an image for a viewer that is a combination of: (a) is distorted image of an image held by a projector due to the interaction of rippling water with the projected image; and (b) has a perceptible change in brightness due to the interaction of rippling water and light that engages the rippling water at an angle. Independent claim 20 is allowable for substantially the same reasons as noted with respect to independent claims 1, 10 and 17.

Claims 2, 4, 6-9, 13-16 and 18-19 are dependent claims that each depend from one of independent claims 1, 10 and 17. Consequently, claims 2, 4, 6-9, 13-16 and 18-19 are each at

least allowable for the reasons noted with respect to the independent claim from which each depends. Claims 2, 4, 6-9, 13-16 and 18-19 may each be allowable for other reasons, and the applicant explicitly reserves the right to assert such reasons in the future.

Claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over the '240 patent in view of the '266 patent, and further in view of U.S. Patent No. 5,167,368 to Nash.

Claim 3 is a dependent claim that depends from independent claim 1. Consequently, claim 3 is at least allowable for the reasons noted with respect to independent claim 1. Claim 3 may be allowable for other reasons, and the applicant explicitly reserves the right to assert such reasons in the future.

Claim 5 has been rejected under 35 U.S.C. §103(a) as being unpatentable over the '240 patent in view of the '266 patent, and further in view of the Admitted Prior Art.

Claim 5 is a dependent claim that depends from independent claim 1. Consequently, claim 5 is at least allowable for the reasons noted with respect to independent claim 1. Claim 5 may be allowable for other reasons, and the applicant explicitly reserves the right to assert such reasons in the future.

The Office takes the position that any method of forming a flow disturbance structure would work equally well and as such the use of an appliqué is an obvious design choice. This is not the case. Certain flow disturbance structures (e.g., straight grooves and lands) can be readily created by removing material from a substrate with, for example, table saws or adding material to a substrate with, for example, appliqué. However, other flow disturbance structures (such as

the hemispherical blisters, pyramids, moons etc. noted in the specification) are in many cases more readily realized by adding material to a substrate. Consequently, any method for forming a flow disturbance structure does not necessarily work equally well and may depend upon the form of the desired flow structure. Consequently, the method of making the flow disturbance structure is not merely a matter of an obvious design choice.

Further, with respect to the alleged admission at page 6, line 7, the applicant asserts that the sandwiching of a polymeric material between sheets of glass or plastic so as to realize a translucent screen does not teach or suggest to one of ordinary skill in the art anything about a screen that employs flowing water, a screen that comprises a flow disturbance structure to cause water that travels over the structure to ripple, or a screen that comprises a flow disturbance structure to cause water that travel over the structure to ripple to an extent that allows a perceptibly distorted image to be produced for a viewer.

Claims 11-12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the '240 patent in view of the '266 patent, and further in view of U.S. Patent No. 6,414,789 to Braun.

Claims 11 and 12 are dependent claims that each depend from independent claim 10. Consequently, claims 11 and 12 are each at least allowable for the reasons noted with respect to independent claim 10. Claims 11 and 12 may each be allowable for other reasons, and the applicant explicitly reserves the right to assert such reasons in the future.

No claim related fees are believed to be due with this response. In the event any such fees are due, please debit Deposit Account 08-2623.

The application now appearing to be in form for allowance, reconsideration and allowance thereof is respectfully requested.

Respectfully submitted,

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